

REMARKS/ARGUMENTS

Claims 113-131 and 133-146 are present in this application. By this Amendment, the specification, and claims 131 and 133 have been amended, and claim 132 has been canceled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

With regard to the arrangement of the specification, the specification has been amended to include headers as suggested by the Examiner.

Claims 131, 132, 135 and 136 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,164,189 to Anson. This rejection is respectfully traversed.

Claim 131 has been amended to include the subject matter of claim 132. The food preparation device of claim 132 comprises at least one water chamber for the controlled dispensation therefrom of water to a bottle-receiving station, a water dispensation controller for controlling the dispensing of water from said at least one chamber to the bottle-receiving station, and a weighing apparatus associated with the bottle-receiving station to determine the weight of the received bottle and any contents of the bottle. The water dispensation controller is arranged to control the dispensing of water to the bottle-receiving station according to weight information received from the weighing apparatus.

The preferred embodiments of food preparation device are for use in the preparation of bottles of formula milk for a baby or toddler. This involves adding sterilized (e.g. recently boiled) water at a temperate of approximately 45-55°C to powdered milk formula in a bottle.

The specification describes how a bottle placed into the bottle-receiving station of the device can be one that has previously had added to it a predetermined amount of powdered milk formula. This is conventionally done by tipping a predetermined number of scoops of powder

into an empty bottle. When manually dosing a bottle with powdered formula it is easy to lose count of the number of scoops, particularly if the counting operation is being carried out in the same room as a bawling, hungry infant, adding too many or too few scoops of powder. The powder-containing bottle is then placed into the bottle-receiving station.

Alternatively, the food preparation device may be provided with a formulation receptacle for containing the milk formula powder and a formulation dispenser for dispensing formulation from the receptacle to an empty bottle previously inserted into the bottle-receiving station. Although this removes the need manually to add a plurality of scoops worth of powder to a bottle, here too the predetermined amount of milk powder may not actually be added to the bottle. This is because milk powder does not readily “flow” in the manner of a liquid, particularly once it has been exposed to moisture. As a result, some powder may stick on the dispenser and not be dispensed into the bottle, leaving the bottle charged with too little powder.

In both of the above scenarios the bottle present in the receiving station may contain an amount of powder different to the intended amount, most usually less than intended but, especially in the case of manual dosing of the bottle, the amount of milk powder can also be greater than intended.

As stated between line 28 of page 24 and line 13 of page 25 of the present application as originally filed (see the published PCT pamphlet, WO 2004/107940):

Whilst the discharge of a fixed amount of water into the bottle 79 is fine if the complete contents of a compartment in the receptacle 70 are successfully transferred from the receptacle 70 into the bottle 79, underdosing can arise if not all of the powder is successfully transferred. Milk powder formulation does not readily “flow” in the manner of a liquid, particularly once it has been exposed to moisture, so if the formulation received in the receptacle 70 has inadvertently been exposed to a high moisture level some of the formulation may stick in the receptacle 70 and

not be transferred to the bottle 79. In this situation, if the device 1 did not take account of this, the concentration of the resultant water/formulation mix would be incorrect, i.e. it would be weak, containing too much water for the transferred formulation. To avoid this, the microprocessor controller 22 may be provided with an additional input, namely for it to use the weighing mechanism 23 to sense the amount of powdered formulation actually transferred into the bottle 79. In this way, if the microprocessor controller realises that, for example, only 70% of the intended weight of powdered formulation has actually reached the bottle 79, it can reduce the amount of water to be transferred to the bottle so as to transfer only 70% of the intended water transfer, thereby ensuring that, although the volume of mixed feed in the bottle is less than was intended, at least the feed mixture is of the correct concentration.

Using the terminology of claim 132, the weighing apparatus of the food preparation device is constructed and arranged to determine the actual weight of any food preparation formulation (e.g. powder) in the bottle at the bottle-receiving station and the water dispensation controller is configured to match the amount of water dispensed to the actual determined weight of the bottle's food preparation formulation. In this way, if the actual amount of food preparation formulation present in the bottle prior to the addition of water was underweight or overweight, the amount of water dispensed will be adjusted accordingly so that the resultant mixture of formulation and water will be of the correct concentration.

This is valuable because it is important for the mixture to have the correct concentration of powder to water if the baby to be fed with it is to be correctly nourished. In particular, it is important for the mixture not to be too "strong", i.e. for there to be an excess of formula powder for the water present, as this is thought to be dangerous.

Anson discloses a device for use in preparing soups and the like and hot or brewed beverages. The device includes a hot water tank and a water dispensing valve that is used to control the discharge of hot water (from the hot water tank) from a faucet. Below the faucet is

positioned a platform, coupled to a weighing assembly, for supporting a container intended to receive the discharged, heated water. The weighing assembly creates a weight control signal related to the weight of water dispensed from the apparatus. This weight control signal is transmitted to a controller, which electronically controls the dispensing of hot water via the faucet.

The passage between line 37 of column 6 and line 27 of column 7 of Anson explains how the apparatus functions:

It should also be noted that, advantageously, the heated water dispensing apparatus 10 is adapted to “tare” the weight of a container 25. In particular, when a container 25 is placed on the platform 20, the weighing assembly 110 generates a weight control signal corresponding to the weight of the container 25 and transmits this weight control signal to the controller 80. The controller 80 stores this weight control signal so as to establish a zero reference point for weighing the liquid dispensed into the container 25. Thus, as water is dispensed into the container 25, only the weight of the water will be weighed and not the weight of the container 25.

As stated above, the weighing assembly 110 generates a weight control signal corresponding to the weight of a container 25 or to the weight of water dispensed into a container 25 and transmits the weight control signal to the controller 80. Advantageously, this operative coupling means that the weight of water on the platform 20 and, hence, the weight of water dispensed can be monitored and controlled by the controller 80. In particular, the controller 80 is adapted to control the dispense valve 30 in accordance with the weight control signals so that a selected volume of water is accurately and automatically dispensed from the dispense valve 30. Such automatic dispensing precludes wastage or insufficient dispensing of heated water.

In operation, a user selects a volume and temperature of water to be dispensed; i.e., enters the selections at the keyboard 70. A volume control signal and temperature control will be generated in response to the selected volume and be transmitted to the controller 80. The controller 80 is adapted to determine the weight of water of the selected temperature corresponding to the selected volume

of water of the selected temperature and store this equivalent weight in its memory. It will be apparent to those skilled in the art that such a determination can be achieved by storing the density of water at various temperatures in the controller memory. The controller 80 then selectively operates the inlet valves 45, 55, outlet valve 65, and a heater 130 (not illustrated) retained in the reservoir to produce water of the selected temperature in the reservoir 14. When water of the selected temperature has been produced, the controller 80 will then operate the dispense valve 30 so that water is dispensed through the faucet 16 and into a container 25. As water is dispensed, the controller 80 receives weight control signals from the weighing assembly 110 corresponding to the weight of water dispensed. The controller 80 compares these weight control signals to the equivalent weight and operates the dispense valve 30 in accordance with the comparison. Specifically, the controller 80 operates the dispense valve 30 so that when the weight of water corresponding to the selected volume has been dispensed, the dispense valve 30 is shut and further dispensing is precluded. Thus, advantageously, with the dispensing apparatus 10 of the present invention neither too much or too little water is dispensed and the problems associated with using an inaccurate amount of water (e.g. wastage, poor product quality etc.) are avoided.

The amount of water dispensed by the Anson device is thus predetermined by the user of the device: “in operation, a user selects a volume and temperature of water to be dispensed” (lines 63-64 of column 6 of Anson). The purpose of the weighing assembly 110 is simply to ensure that the amount of water dispensed matches the volume of water (to be dispensed) selected by the user and inputted via the keyboard 70.

The Anson device does not match the amount of water dispensed to the determined weight of any contents present in the container 25 prior to water dispensation. Suppose that the Anson device was to be used to make up a container full of hot chocolate (line 13 of column 1 of Anson). If the intention was to make two pints of hot chocolate, and the user of the Anson device counted out too much or too little hot chocolate powder into the container 25 before placing it under the faucet, the Anson device is not capable of taking this into count and to over

or under dispense two pints of hot water so as to ensure that the resultant hot chocolate mixture is of the correct concentration. Instead, the Anson device would simply “tare” the weight of the container 25 and the added hot chocolate powder and would generate a weight control signal corresponding to the weight of the container 25 and the weight of the hot chocolate powder and transmit that weight control signal to the weight controller 80, where this would be stored as the weight control signal so as to establish a zero reference point for weighing the liquid dispensed into the container 25. With reference to lines 40-49 of column 6 of Anson, the effect of placing a container 25 containing hot chocolate powder on the weighing assembly 110 would be to cause the Anson device to think that the container 25 was slightly heavier than normal, but the increased weight (relative to an empty container) would thereafter be ignored as the zero reference point would be established according to the weight of the container and the hot chocolate powder. How much hot chocolate powder was present (whether the right amount, too little or too much) would not be recognized by the Anson device. Furthermore, the amount of hot chocolate powder present would not in any way be used to control the amount of water dispensed. Instead, the amount of water dispensed is dictated by the volume of water manually selected and input via the keyboard 70 by the user of the Anson device.

Applicants thus respectfully submit that the rejection is misplaced.

With regard to dependent claims 135 and 136, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 133, 134 and 137-142 were rejected under 35 U.S.C. §103(a) over Anson in view of U.S. Patent No. 6,173,117 to Clubb. The Clubb patent, however, does not correct the deficiencies noted above with regard to Anson and the subject matter of claim 132 combined

with the subject matter of claim 131. As such, Applicants submit that these dependent claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is requested.

Applicants acknowledge with appreciation the indication that claims 143 and 144 contain allowable subject matter and that claims 145 and 146 are allowed.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to Deposit Account No. 14-1140.

Respectfully submitted,

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